

Alaska Regional Collaboration Team
Outreach Plan

Promoting Environmental Literacy – A Core NOAA Priority

The Alaska Regional Collaboration Team (ARCTic) recognizes the importance of public outreach and environmental literacy in Alaska, and has made it a key component of its regional collaboration plan. The unique characteristics of the Alaska Region and the role NOAA plays in addressing economic, social and environmental needs in Alaska provide an opportunity to effectively showcase NOAA's contributions within the region, nationally, and internationally. The State of Alaska encompasses four large living marine ecosystems and more than half of the entire U.S. coastline. In addition, studies indicate this northern, high-latitude region may provide early indicators of the effects of climate change.

Alaskans rely heavily on NOAA programs and services to support commerce in a multitude of ways, as well as prepare for, and survive harsh conditions both on land and at sea. NOAA information and products essential to Alaska residents on a daily basis include: weather forecasts and warnings over land and maritime provinces; sea conditions (SST, sea state, sea ice conditions, etc.); hydrological forecasts; fish stock and marine mammal assessments; tsunami watches and warnings; volcanic ash plume forecasts and warnings; drought and associated wild fire danger forecasts; climate forecasts; and transportation hazards (e.g., aviation, marine, and land).

ARCTic supports NOAA's commitment to promote and enhance environmental literacy, as outlined in the NOAA Strategic Plan:

"As a global leader in oceanic and atmospheric sciences, NOAA has the responsibility to improve public understanding of our planet's dynamic air and water systems and the effect those systems have on all aspects of people's lives. We work with partners in educational institutions and organizations, government agencies at all levels, and private industry to build environmental literacy. NOAA seeks to educate and inform present and future generations about the changing Earth and its processes, to inspire youth to pursue scientific and technical careers, and too improve the public's understanding and use of NOAA's products and services. The Agency accomplishes this through a multitude of activities that represent a continuum from outreach to formal and informal education." – NOAA 2006-2011 Strategic Plan

Furthermore, VADM Lautenbacher has identified the importance of providing the Nation with a "climate service" that will effectively combine various activities in the context of an integrated program of observations, research, forecasting, assessment, data product development, information services, and education. This ARCTic Outreach Plan will be a part of this overall NOAA objective of increased public environmental literacy and education.

GOALS

NOAA established an Office of Education and Sustainable Development (OESD), and an Education Council that represents all the line offices across NOAA. One of OESD's first tasks was to develop a national education plan to move the agency to the forefront of environmental literacy efforts and to serve as a framework for planning investment of resources. The ARCTic Outreach Plan incorporates the following national NOAA education plan goals and strategies for Alaska:

Goal 1: Increase collaboration and communication efforts by building and maintaining effective partnerships. A principal focus of the NOAA ARCTic is directed toward this goal. It establishes a communication channel across all the line offices, a forum to support existing and develop new internal and external partnerships, and the opportunity to more effectively leverage resources.

Goal 2: Inform the public about how to improve stewardship of coastal and marine ecosystems. This goal is aimed at enhancing the public's environmental literacy in the context of understanding and conserving our coastal and marine resources. ARCTic's objectives include developing materials that translate scientific information into easily understood information that communicate to non-scientists compelling, clear and consistent messages. This will require developing and enhancing communication tools that reach the public more effectively from school-age children to native Alaskans, business, and government leaders.

Goal 3: Develop coordinated campaigns within NOAA and with external partners to improve NOAA's local, national, and international recognition as a leader in environmental science, education, and stewardship. NOAA provides key support for the economic livelihood (especially to the fishing and maritime transportation industries) and protection of life and property for Alaskans. NOAA offices also play critical roles in understanding the accelerating impacts of climate change in Alaska, as well as assisting communities and industry to proactively cope with these changes. ARCTic will build upon the very visible role of NOAA programs in the state to improve the overall recognition and image of NOAA as a lead agency in partnership with other agencies promoting safety, supporting economic sustainability, and providing environmental information services and leadership.

OBJECTIVES

In support of the above goals, the ARCTic Outreach Plan includes the following objectives and events (to be reviewed and updated annually):

1. Develop an Integrated Services Plan for Alaska

Face-to-face Team Meeting - Integrated Services Plan:

Description of Deliverable - In FY07, NOAA's Alaska Region Collaboration Team was formed. The first conference call was held on November 27, 2006. Since then the team

has met via conference call on a monthly and ad hoc basis. One face-to-face meeting was held on January 20, 2007, in conjunction with Anchorage Marine Science Symposium.

A priority task for the team is to develop an Integrated Services Plan for Alaska which will incorporate findings and recommendations from an external review panel. The composition of the panel members and the process are currently in development under the guise of the NOAA Integrate Services Assessment. The first meeting the Integrated Services Assessment is planned for August 16-17, 2007, at the Kasitsna Bay Laboratory near Homer, Alaska.

Value-added of regional collaboration construct – Cross NOAA Line Offices and cross NOAA Goals knowledge and plans are being shared on a routine basis as well as being incorporated into on-going operational and future planning activities. Special roles of line offices or partners – All NOAA Line Offices are represented and will be contributing to the overall Integrated Services Plan.

2. Partner with NOAA line offices, State of Alaska Museum, University of Alaska, and Local High Schools to Develop Science on a Sphere and Associated Play Sets

The ARCTic identified spherical displays as a priority for the Alaska Region. As such, NOAA collaborated with partners to establish Science on a Sphere (SOS) for the region. The ARCTic CEO Work Group Lead coordinated the effort with partners to seek funding for the sphere. NOAA Fisheries Service contributed approximately \$10,000 in funding for hard drives used in the development of fishery and marine mammal-related play sets. In addition, NOAA Fisheries Services agreed to fund the hardware component for installation of the sphere, which totaled over \$60,000.

In partnership with the State of Alaska Museum, NOAA and other partners submitted a proposal to NOAA's Office of Education for Environmental Literacy Grants: Spherical Display Systems for Earth Science requesting funding under Priority 1. This priority includes installation of a Science on a Sphere to enhance informal science education learning and build environmental literacy among the general public.

Successful funding would provide the opportunity to establish a comprehensive NOAA Mentor/Intern Program. The program would focus on improving communications, education and training on marine resource science issues and increase scientific education for marine-related professions. If the effort is unsuccessful, the ARCTic CEO Work Group would research other funding opportunities in FY08 or seek funding from partners and other NOAA line offices to complete the budget requirements for installation of Science on a Sphere in the Alaska region.

3. Develop NOAA's ARCTic External Website

The ARCTic will develop an external website to highlight the integration between NOAA agencies and external partners. The website would showcase products and services developed and delivered through the ARCTic's collaboration efforts.

Specifically, these products and services would link to the activities of the various ARCTic work groups. In addition, there would be a portion of the website that includes a list of NOAA's external partners in Alaska with links to their websites and portals.

4. Showcase NOAA's Place-Based Resources through Virtual Alaska

The ARCTic would partner with staff from NOAA's Earth System Research Laboratory in Boulder, Colorado, to create an online virtual environment, Virtual Alaska, that provides visitors with a variety of interactive experiences. The goal would be to promote ARCTic's products and services and ultimately the state of Alaska. This virtual area would supplement NOAA's Virtual World, an ongoing project based in Second Life. Virtual Alaska could feature a number of demonstrations on climate change such as an interactive exhibit on glacial ice melt, melting permafrost that creates a drunken forest, or a demonstration highlighting the effects of climate change on the fishing industry in Alaska. NOAA's Earth Systems Research Laboratory has developed a proposal (see attached proposal), which outlines these modules. Other modules could be developed based on input from the Work Group and ARCTic. Approximate cost of the project would be \$98,000 for three modules (see attached proposal).

5. Promote Events to Increase Awareness and Understanding of "One NOAA"

The ARCTic will collaborate for "One NOAA" presence at Pacific Marine Expo in Seattle, Washington, in November. A large display will showcase four Alaska NOAA Line Offices including NOAA Weather Service, NOAA Fisheries Service, NOAA Law Enforcement and NOAA National Ocean Service. This display may be used for other shows that highlight NOAA's Alaska region.

6. Support NOAA/Partner Information Campaigns

The ARCTic recognizes the importance of communicating to the public through the media. In FY08, the team would work with Producer Jim Peronto, a TV Meteorologist for the NOAA National Weather Service Alaska Region, to produce education and outreach segments showcasing NOAA collaboration efforts with partners. These segments will be broadcasted by Anchorage KAKM-Channel 7, an affiliate of PBS Television Network.

Over the course of the year, the ARCTic would also work with Alaska Sea Grant to revive the Arctic Science Journeys Radio Show, a free service that offers interesting stories about science, culture, and the environment of the far north. Through this program, the ARCTic could disseminate messages and provide interviews highlighting successful partnerships. Additional ARCTic messages would also be disseminated through joint press releases between NOAA line offices and partners.

7. Support the Center for Ocean Science Education Excellence (COSEE)

The ARCTic would support the creation of a network of partners that focus on activities on ocean and coastal ecosystems communities. Establishing a Center for Ocean Science Education Excellence (COSEE) in Alaska provides a unique opportunity to capitalize on the International Polar Year's spotlight on the Arctic, the wealth of ocean and climate change research currently underway in Alaska, as well as the richness of Alaska's local and traditional knowledge inherent in its indigenous populations. As envisioned, COSEE Alaska will be a cohesive system of infrastructure, educational tools, cultural context, and scientific interactions used to further an ocean literate populace as well as demonstrate the link between the impacts of coastal climate change and human activity. To achieve this vision, COSEE Alaska will create a network of scientists and educators in Alaska dedicated to developing activities that focus on ocean and coastal ecosystems and communities experiencing the impacts of ocean climate change and to sharing results with the COSEE network, and the nation.